

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A charge pump circuit, comprising:

first and second diodes interposed in series between an input portion for receiving a power source input to an object to be stepped up and an output portion for outputting a stepped up voltage such that a forward direction of each diode is directed to a side of the output portion;

a capacitor interposed on a connecting path between a connecting portion of the first diode on a side of the output portion and a ground, the first diode being disposed on a side of the input portion with respect to the second diode, the capacitor having two connecting portions;

a first switch for conducting and cutting a connecting path between one of the connecting portions of the capacitor and the ground;

a second switch for conducting and cutting a connecting path between the one connecting portion of the capacitor and the input portion; and

a driver for conducting the first switch and the second switch alternately in phases opposite to each other;

wherein:

a constant current charging and discharging circuit, using a first follower circuit and a second follower circuit, is arranged to be along a first path, through which a current flows when a connecting path between the one connecting portion of the capacitor and the ground is conducted by the first switch and a current from the input portion charges the capacitor, and along a second path, through which a current flows when the connecting path

between the one connecting portion of the capacitor and the input portion is conducted by the second switch and the capacitor is discharged; ~~and~~

~~the first and second follower circuits~~ circuit each comprisecomprises:

~~a first transistor and a second transistor respectively~~interposed at any position on the first path ~~and the second path~~for controlling an amount of a flowing current flowing through the ~~paths~~ first path and functioning as the first switch; and

~~a first resistor and a second resistor~~connected in series to the first transistor ~~and the second transistor, respectively, on an upstream side or a downstream side in a current flowing direction of the first transistor, wherein one end of the second resistor is connected to the first diode and another end of the second resistor is connected to the second transistor;~~

the second follower circuit comprises:

a second transistor interposed at any position on the second path for controlling an amount of a flowing current flowing through the second path and functioning as the second switch; and

a second resistor connected in series to the second transistor on an upstream side in a current flowing direction of the second transistor, wherein one end of the second resistor is connected to the first diode and another end of the second resistor is connected to the second transistor;

a third resistor;

a fourth resistor; and

a third diode, wherein the third resistor, the fourth resistor, and the third diode are directly connected to each other by a first connecting point, and the first connecting point is directly connected to a base of the first transistor.

2. (Canceled)

3. (Original) The charge pump circuit according to Claim 1,
wherein the charge pump circuit is for vehicle mounting and is used for
driving a gate of an FET for controlling a power source for controlling a flowing state of a
power source current supplied from a power source line to a load.

4-6. (Canceled)

7. (Currently Amended) The charge pump circuit according to Claim 1, further
comprising:

~~—— a third resistor;~~

~~—— a fourth resistor;~~

a fifth resistor; and

~~a third diode, wherein the third resistor, the fourth resistor, the fifth resistor and the
third diode are connected in series.~~ a sixth resistor, wherein a second connecting point exists
between the fifth resistor and the sixth resistor, and the second connecting point is directly
connected to a base of the second transistor.

8. (Canceled)

9. (Previously Presented) The charge pump circuit according to Claim 1,
wherein the first resistor is connected on one end to the first transistor and is connected on
another end to ground.